



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/563,039	06/19/2006	Hanna Maria Smolarek	771_001	6059	
25191	7590	10/26/2009	EXAMINER		
BURR & BROWN		DELISLE, ROBERTA S			
PO BOX 7068		ART UNIT		PAPER NUMBER	
SYRACUSE, NY 13261-7068		3677			
		MAIL DATE		DELIVERY MODE	
		10/26/2009		PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/563,039	SMOLAREK ET AL.	
	Examiner	Art Unit	
	ROBERTA DELISLE	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 July 2009.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 232-236 and 239-253 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 232-236 and 239-253 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 30 December 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Response to Arguments

1. Applicant's election with traverse of Species IX (figure 46 and Sub-species D (figure 52) in the reply filed on 7/20/09 is acknowledged. The traversal is on the ground(s) that it would not be a serious burden on the Examiner to search all species I-XIV and subspecies A-G. This is not found persuasive because each species and sub-species has unique traits requiring specific searches. The requirement is still deemed proper and is therefore made FINAL.

2. Claim Status:

- a. Claims 232-236 & 239-253 Elected
- b. Claims 237-238 & 254-285 Non-Elected

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 232, 234-236, 239, 241, 243-248, 250, & 252-253 are rejected under 35 U.S.C. 102(b) as being anticipated by Enders (US 3,241,589).

**Regarding Claim 232, Enders discloses:
Reference figures 1-10, for example**

(New) A fastener assembly comprising a washer and a fastening element (Abstract), the fastening element (14) having an abutting face (14B) for transferring force to the washer

Art Unit: 3677

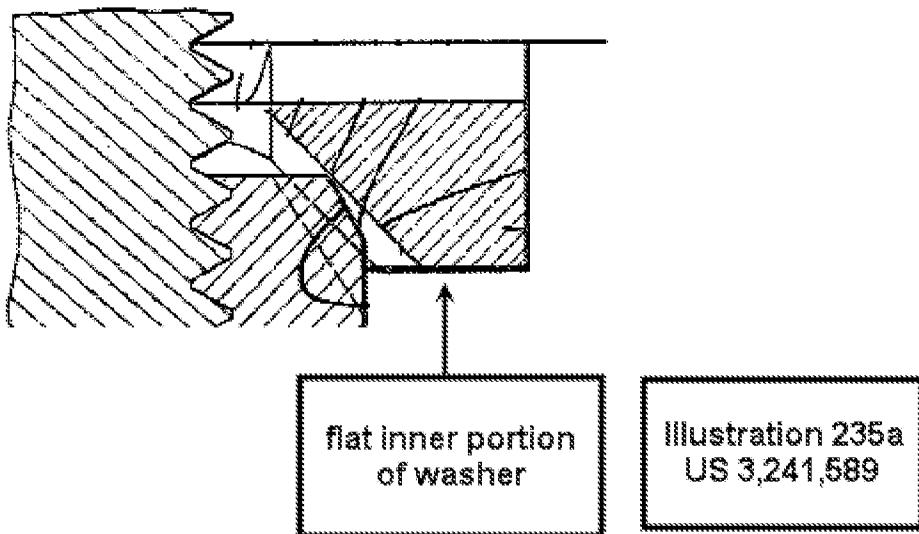
(13), the fastening element (14) having a periphery about the abutting face (14B), the periphery being angled (figure 7) relative to the abutting face (14B) on the fastening element (14), the washer (13) having a first face (13B) for contact with the fastening element (14), the first face (13B) having an inner portion (figure 7) for contact with the abutting face (14B) and a sloped outer portion (figure 7) about the inner portion (figure 7), wherein the sloped outer portion (figure 7) is arranged to engage with the periphery of the fastening element (14)

Regarding Claim 234, Enders further discloses:

(New) A fastener assembly as claimed in claim 232, wherein the inner portion (figure 7) of the first face (13B) of the washer is annular (figure 7)

Regarding Claim 235, Enders further discloses:

(New) A fastener assembly as claimed in claim 232, wherein the inner portion (figure 7) of the first face (13B) of the washer is flat (See Illustration 235a below)



Regarding Claim 236, Enders further discloses:

(New) A fastener assembly as claimed in claim 232, wherein the fastening element (14) is an internally threaded fastener (Column 2 Lines 42-43, figure 7).

Regarding Claim 239, Enders further discloses:

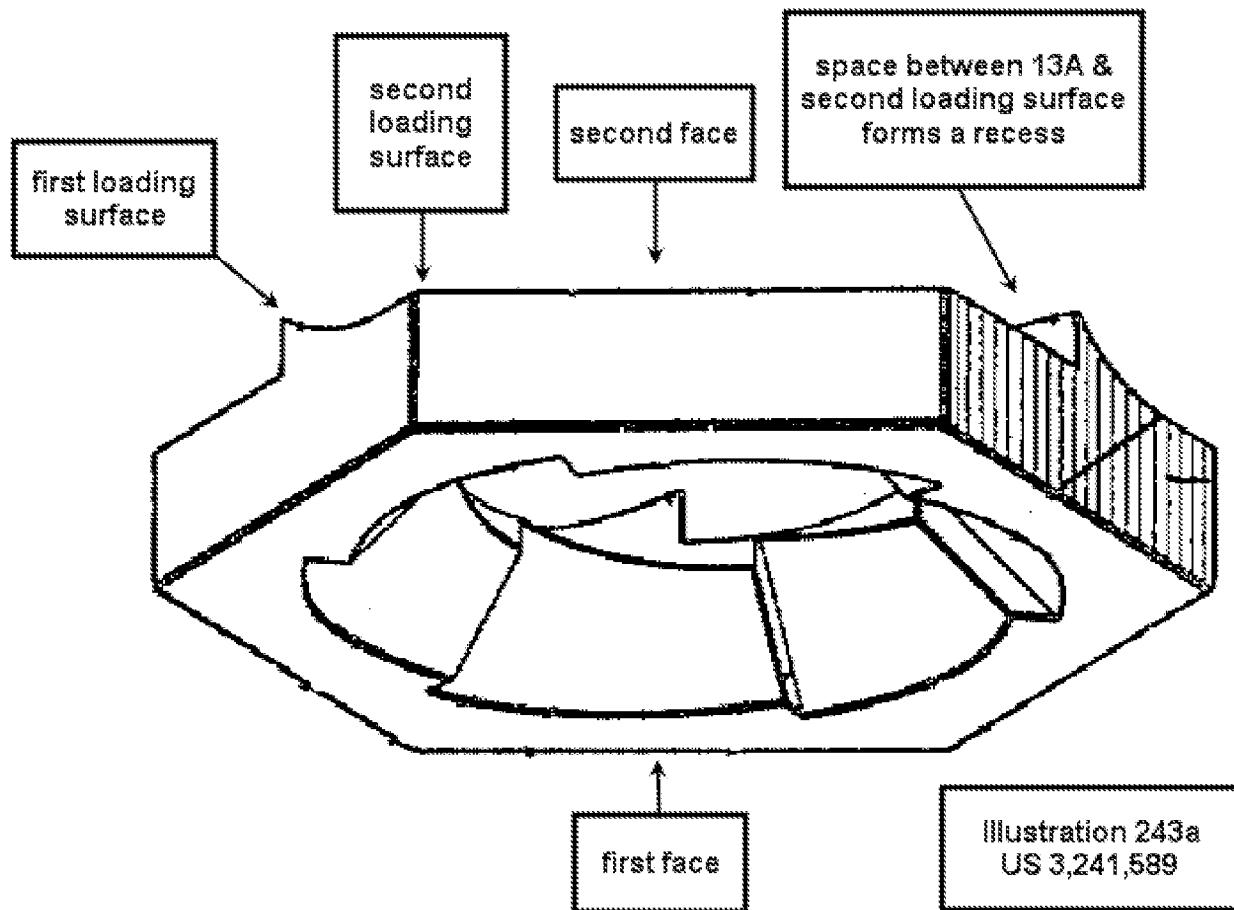
(New) A fastener assembly as claimed in claim 232, wherein the sloped outer portion of the first face (13B) of the washer (13) comprises a plurality of ramps (13C) forming a circular ratchet structure (Column 5 Line 33) around the inner portion (figure 7) for resisting rotation in an unscrewing direction, while allowing rotation in a tightening direction (figure 7)

Regarding Claim 241, Enders further discloses:

(New) A fastener assembly as claimed in claim 232, wherein the washer (13) is elastically deformable

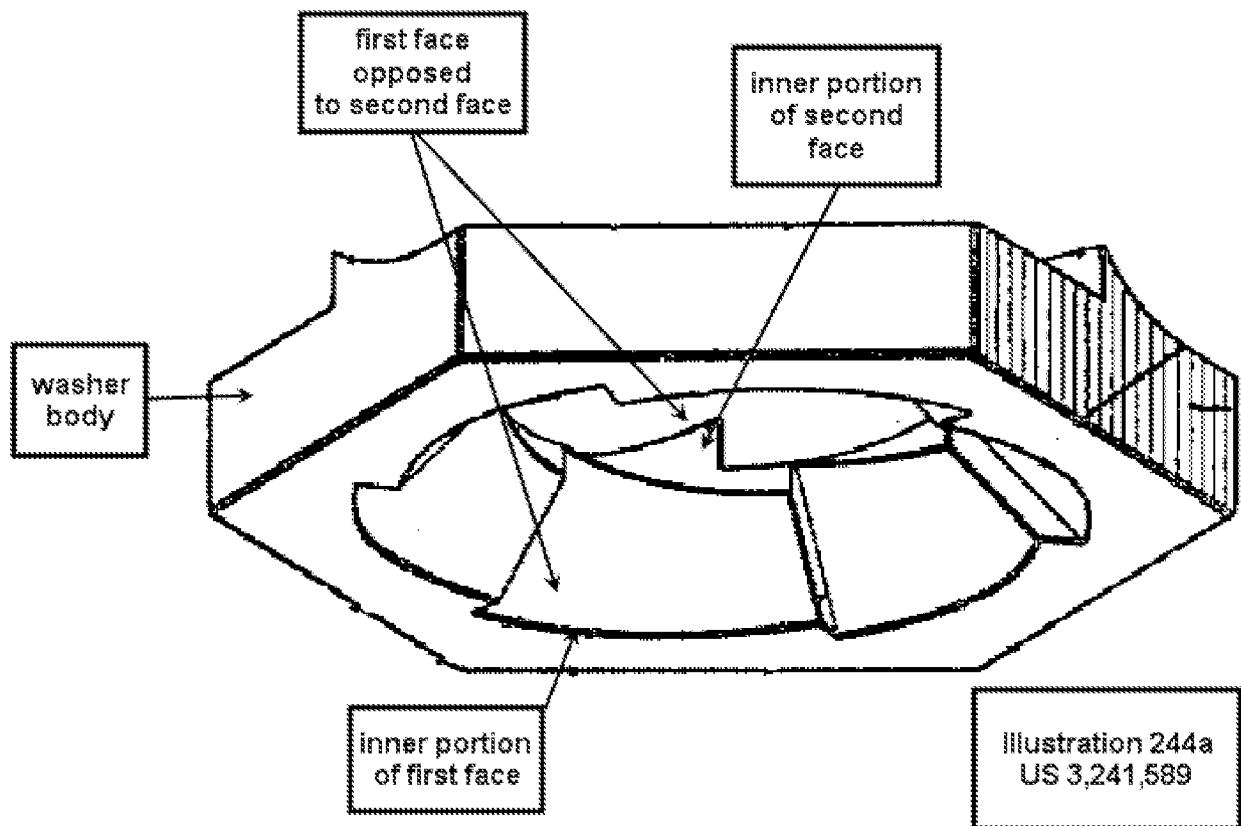
Regarding Claim 243, Enders further discloses:

(New) A fastener assembly as claimed in claim 242, wherein the washer (13) has a second face (13A) opposed to the first face (13B), the second face (13A) having a first loading surface and a second loading surface, the first and second loading surfaces being separated by a recess (See Illustration 243a in Claim 243), whereby the washer (13) is arranged to transfer load only through the first loading surface (13) when loaded up to a first loading limit, and is arranged to transfer load through both first and second loading surfaces beyond the first loading limit



Regarding Claim 244, Enders further discloses:

(New) A fastener assembly as claimed in claim 232, wherein the washer (13) has a body (13) including an inner portion extending between the inner portion of the first face (13B) and an inner portion of a second face opposed to the first face (13B), and where the inner portion of the body (13) provides central stiffness to the washer (13)
(See Illustration 244a below)



Regarding Claim 245, Enders further discloses:

(New) A washer (Abstract) for use in a fastener assembly, the fastener assembly (Abstract) comprising the washer (13) and a fastening element (14), the fastening element (14) having an abutting face (14B) for transferring force to the washer (13), the fastening element (14) having a periphery about the abutting face (14B), the periphery being angled (figure 7) relative to the abutting face (14B) of the fastening element (14), wherein the washer (13) has a first face (13B) for contact with the fastening element (14), the first face (13B) having an inner portion for contact with the abutting face (14B) and a sloped outer portion (figure 7) about the inner portion (figure 7), the sloped outer portion (figure 7) being arranged to engage with the periphery of the fastening element (14)

Regarding Claim 246, Enders further discloses:

(New) A washer as claimed in claim 245, wherein the inner portion (figure 7) of the first face (13B) of the washer (13) is annular (figure 7)

Regarding Claim 247, Enders further discloses:

(New) A washer as claimed in claim 245, wherein the inner portion (figure 7) of the first face (13B) of the washer is flat (See Illustration 235a in Claim 235)

Regarding Claim 248, Enders further discloses:

(New) A washer as claimed in claim 245, wherein the sloped outer portion of the first face (13B) of the washer (13) comprises a plurality of ramps (13C) forming a circular ratchet structure (Column 5 Line 33) around the inner portion (figure 7) for resisting rotation in an unscrewing direction, while allowing rotation in a tightening direction (figure 7)

Regarding Claim 250, Enders further discloses:

(New) A washer as claimed in claim 245, wherein the washer (13) is elastically deformable.

Regarding Claim 252, Enders further discloses:

(New) A washer as claimed in claim 251, wherein the washer (13) has a second face opposed to the first face (13B), the second face having a first loading surface and a second loading surface (See Illustration 243a in Claim 243), the first and second loading surfaces being separated by a recess, whereby the washer (13) is arranged to transfer load only through the first loading surface when loaded up to a first loading limit, and is arranged to transfer load through both first and second loading surfaces beyond the first loading limit.

Regarding Claim 253, Enders further discloses:

(New) A washer as claimed in claim 245, wherein the washer (13) has a body (13) including an inner portion aligned with the inner portion of the first face (13B), and where the inner portion of the body (13) provides stiffness to the washer (13)
(See Illustration 244a in Claim 244)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 233, 242, & 251 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enders (US 3,241,589).

Regarding Claim 233, Enders discloses:

(New) A fastener assembly as claimed in claim 232, wherein the periphery is chamfered around the abutting face (14B)

Examiner takes official notice that it is old and well known to use chamfers. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have replaced straight edges of the hole in Enders with a chamfered opening to facilitate assembly.

Regarding Claim 242, Enders discloses:

(New) A fastener assembly as claimed in claim 241, wherein the stiffness of the washer (13) increases with load

Examiner notes that it would have been an obvious matter of design choice to select a material for the washer wherein the stiffness increases with the load, as Applicant has not disclosed that it solves any stated problem of the prior art or is for any particular purpose. It appears that the invention would perform equally well as the invention disclosed by Enders.

Regarding Claim 251, Enders further discloses:

(New) A washer as claimed in claim 250, wherein the stiffness of the washer (13) increases with load.

Examiner notes that it would have been an obvious matter of design choice to select a material for the washer wherein the stiffness increases with the load, as Applicant has not disclosed that it solves any stated problem of the prior art or is for any particular purpose. It appears that the invention would perform equally well as the invention disclosed by Enders.

Allowable Subject Matter

7. Claims 240 & 249 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

.Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERTA DELISLE ("Bobbi") whose telephone number is (571) 270-3746. The examiner can normally be reached on M-F 8 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor D. Batson can be reached on (571) 272- 6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor Batson/
Victor D. Batson
Supervisory Patent Examiner
Art Unit 3677

rsd